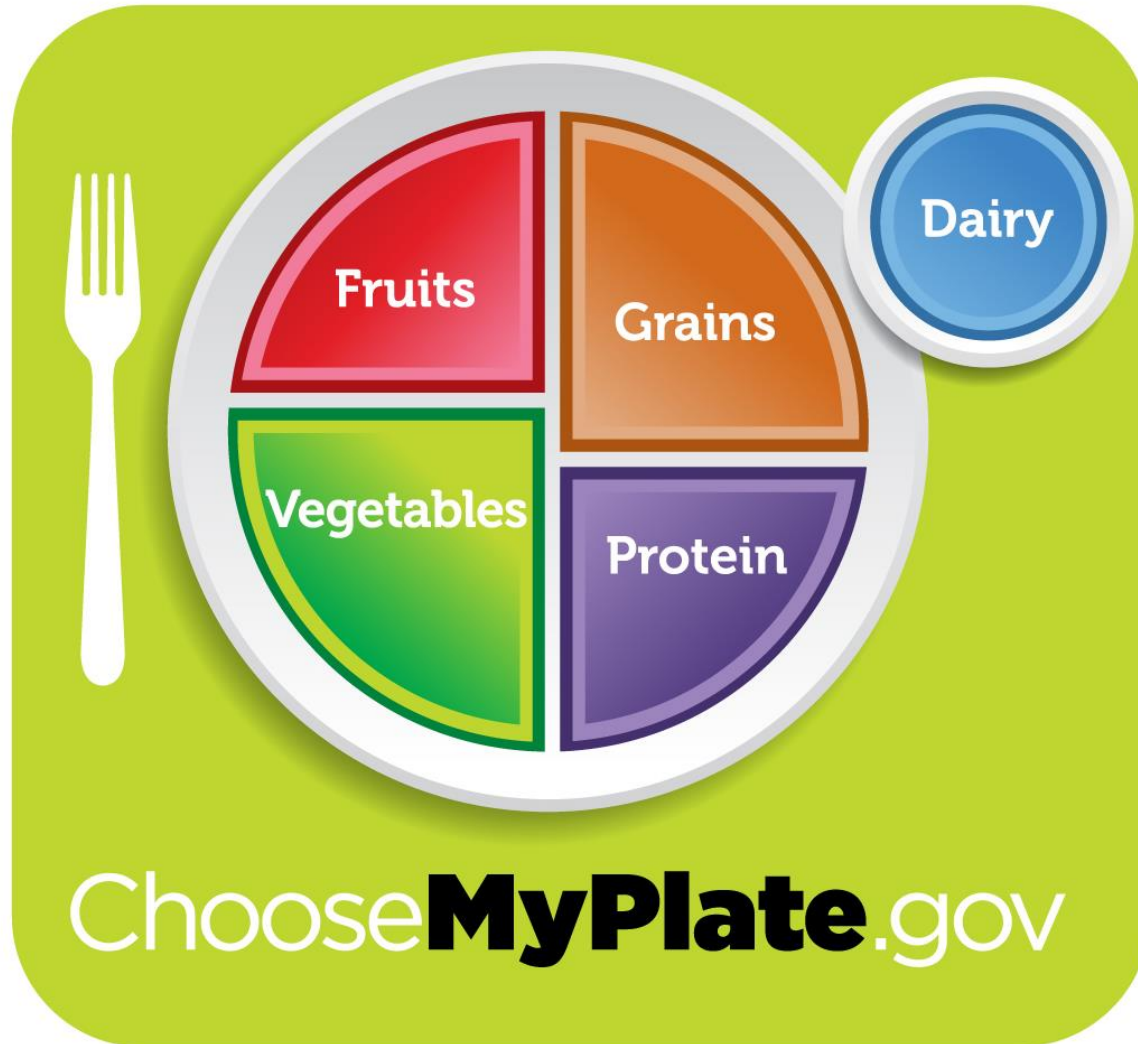


Forming a Good Nutrition Plan



Dietary Guidelines

- ◆ Nutrition is the scientific study of the relationship of food to optimal health and performance.
- ◆ The Recommended Dietary Allowance (RDA) was established in the 1940's to prevent acute deficiency diseases.
- ◆ The RDA is insufficient for 'optimum' health.
- ◆ Dietary Reference Intake (DRI) is the newer term that will replace the RDA values
- ◆ These values are being revised to prevent or delay the onset of chronic diseases, today's primary nutrition-related problem

Sample Label for
Macaroni and Cheese

Start
Here

Limit
these
Nutrients

Get
Enough
of these
Nutrients

Footnote

Nutrition Facts			
Serving Size 1 cup (228g)			
Servings Per Container 2			
Amount Per Serving			
Calories 250		Calories from Fat 110	
			% Daily Value*
Total Fat 12g		18%	
Saturated Fat 3g		15%	
Trans Fat 1.5g			
Cholesterol 30mg		10%	
Sodium 470mg		20%	
Total Carbohydrate 31g		10%	
Dietary Fiber 0g		0%	
Sugars 5g			
Protein 5g			
Vitamin A		4%	
Vitamin C		2%	
Calcium		20%	
Iron		4%	
* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:			
	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Daily Value,
not RDA is
the unit used
on food labels

Quick
Guide
to % DV

5% or less
is low
20% or more
is high

New FDA food labels

Nutrition Facts	
Serving Size 2/3 cup (55g)	
Servings Per Container About 8	
Amount Per Serving	
Calories 230	Calories from Fat 72
	% Daily Value*
Total Fat 8g	12%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 37g	12%
Dietary Fiber 4g	16%
Sugars 1g	
Protein 3g	
Vitamin A	10%
Vitamin C	8%
Calcium	20%
Iron	45%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily value may be higher or lower depending on your calorie needs.	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g

Nutrition Facts	
8 servings per container	
Serving size	2/3 cup (55g)
Amount per serving	
Calories	230
	% Daily Value*
Total Fat 8g	10%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 37g	13%
Dietary Fiber 4g	14%
Total Sugars 12g	
Includes 10g Added Sugars	20%
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

Health Guideline: Do not eat a food if you cannot pronounce the ingredients.

Nutrition Facts		INGREDIENTS: CHOCOLATE SANDWICH COOKIES - SUGAR, UNBLEACHED ENRICHED FLOUR (WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMINE MONONITRATE (VITAMIN B1), RIBOFLAVIN (VITAMIN B2), FOLIC ACID), HIGH OLEIC CANOLA AND/OR PALM AND/OR CANOLA OIL, COCOA (PROCESSED WITH ALKALI), HIGH FRUCTOSE CORN SYRUP, CORNSTARCH, LEAVENING (BAKING SODA AND/OR CALCIUM PHOSPHATE), SALT, SOY LECITHIN, VANILLIN - AN ARTIFICIAL FLAVOR, CHOCOLATE. CONTAINS: WHEAT, SOY.
Serving Size 1 package		
Amount Per Serving		COOKED HAM - WATER ADDED - CHOPPED AND FORMED - SMOKE FLAVOR ADDED - HAM, WATER, CONTAINS LESS THAN 2% OF SODIUM LACTATE, POTASSIUM CHLORIDE, MODIFIED CORNSTARCH, SUGAR, SODIUM PHOSPHATE, SALT, SODIUM DIACETATE, SODIUM ASCORBATE, FLAVOR, SODIUM NITRITE, SMOKE FLAVOR. PASTEURIZED PREPARED AMERICAN CHEESE PRODUCT - MILK, WATER, MILKFAT, MILK PROTEIN CONCENTRATE, WHEY, WHEY PROTEIN CONCENTRATE, CONTAINS LESS THAN 2% OF SODIUM CITRATE, SALT, LACTIC ACID, SORBIC ACID AS A PRESERVATIVE, CHEESE CULTURE, ENZYMES, OLEORESIN PAPRIKA (COLOR), ANNATTO (COLOR), WITH STARCH ADDED FOR SLICE SEPARATION. CONTAINS: MILK. CRACKERS - ENRICHED WHEAT FLOUR (WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMINE MONONITRATE, RIBOFLAVIN, FOLIC ACID), VEGETABLE SHORTENING (SOYBEAN OIL, PARTIALLY HYDROGENATED COTTONSEED OIL WITH TBHQ AND CITRIC ACID ADDED TO HELP FLAVOR), SUGAR, LEAVENINGS (BAKING SODA AND/OR MONOCALCIUM PHOSPHATE), SALT, WHEY (FROM MILK), SOY LECITHIN, NATURAL FLAVOR, ENZYMES. CONTAINS: WHEAT, MILK, SOY.
Calories 340 Calories from Fat 140		
% Daily Value*		
Total Fat 16g	25%	
Saturated Fat 6g	30%	
Trans Fat 0g		
Cholesterol 30mg	10%	
Sodium 580mg	24%	
Total Carbohydrate 38g	13%	
Dietary Fiber Less than 1g	4%	
Sugars 17g		
Protein 11g	17%	
DIST. BY KRAFT FOODS GROUP, INC., NORTHFIELD, IL 60093-2753 USA		

Generally Recognized as Safe (GRAS) food additives may not be so safe



http://www.huffingtonpost.com/alison-brown-ms/food-additives_b_3863317.html
<http://www.hungryforchange.tv/article/top-10-food-additives-to-avoid>

Dietary Deficiencies

- ◆ Only 3% consume at least three daily servings of vegetables, with at least one serving of dark green or orange vegetables
- ◆ Only 7% consume at least six daily servings of grain products with at least three being whole grains
- ◆ Only 25% of females of childbearing age (12–49 years) consume enough iron
- ◆ Only 28% consume at least two servings of fruit at day
- ◆ Only 46% meet recommendations for calcium intake

Essential Nutrients

- ◆ The essential nutrients are carbohydrates, fat, protein, vitamins, minerals, and water
- ◆ Essential nutrients must be supplied by the diet
- ◆ Some experts list fiber as a 7th essential nutrient, but it is a form of carbohydrate
- ◆ The energy nutrients are carbohydrates, fat, and protein, which supply the body with calories, also referred to as macronutrients

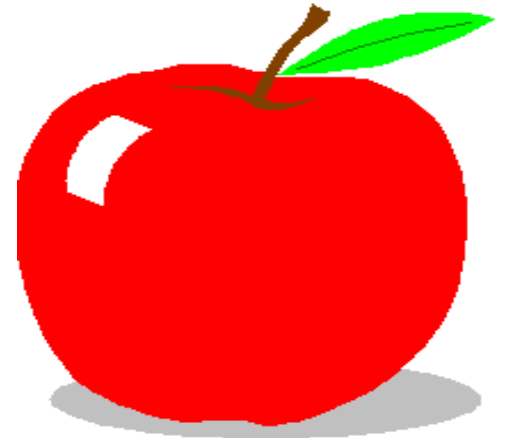
Calories

- ◆ A calorie is a measure of food energy
- ◆ A gram of carbohydrate or protein provides 4 calories of energy
- ◆ A gram of fat provides 9 calories
- ◆ A gram of alcohol provides 7 calories, but is not an essential nutrient



Calories

- ◆ At least 55–60% of the diet should be in the form of carbohydrates; a minimum of 45% of these should be complex carbohydrates
- ◆ Some sources recommend that no more than 25–30% of calories should come from fat
- ◆ The typical American diet is approximately 40% calories from fat
- ◆ Approximately 15% should come from protein



WHAT ARE OUR PROTEIN NEEDS ACCORDING TO IMPARTIAL EXPERTS?

The answer is a spectrum.



2 1/2% At the low end of the curve are estimates of human protein needs reported in the American Journal of Clinical Nutrition which say we need 2 1/2% of our daily calories from protein. Many populations have, in fact, lived in excellent health on this amount.

4 1/2% The World Health Organization has established a minimum daily requirement of 32 grams of protein a day for a 150 pound man. Since there are four calories in a gram of protein, this means WHO stipulates such a man should get 128 calories of protein a day. This amounts, according to WHO statistics, to 4 1/2% of caloric intake. Official WHO figures for women are similar.

The Food and Nutrition Board recommends in their official report that we get .213 grams of protein per pound of body-weight per day. This translates to 4 1/2% of our daily calories from protein.

6% The Food and Nutrition Board takes it a step further. After giving what amounts of a 4 1/2% figure for a "minimum daily requirement," then add a 30% safety margin, designed to "meet the needs of 98% of the United States population." This gives them a figure of just under 6%, which they call a "recommended daily requirement."

8% The National Research Council also figures in a substantial safety margin, and comes up with a figure of just over 8% of our calories needing to be from protein. This figure is not a "minimum" daily requirement, but rather is issued as a "recommended" daily requirement, and is presented as more than adequate for 98% of the population.

COMPARISON OF THE MILKS OF DIFFERENT SPECIES

	Percent of Calories As Protein	Time Required to Double Birth- weight (days)
Human	5%	180days
Mare	11%	60 days
Cow	15%	47 days
Goat	17%	19 days
Dog	30%	8 days
Cat	40%	7 days
Rat	49%	4 days

Data derived from: Bell, G., *Textbook of Physiology and Biochemistry*, 4th ed.,
Williams and Wilkins, Baltimore, 1954, pgs. 167-170. Adapted in McDougall, J.,
The McDougall Plan, New Century Publishers, 1983, pg. 101

PERCENTAGE OF CALORIES FROM PROTEIN

LEGUMES

Soybean sprouts	54%
Mungbean sprouts	43%
Soybean curd (tofu)	43%
Soy flour	35%
Soybeans	35%
Soy sauce	33%
Broad beans	32%
Lentils	29%
Split peas	28%
Kidney beans	26%
Navy beans	26%
Lima beans	26%
Garbanzo beans	23%

VEGETABLES

Spinach	49%
New Zealand spinach	47%
Watercress	46%
Kale	45%
Broccoli	45%
Brussels sprouts	44%
Turnip greens	43%
Collards	43%
Cauliflower	40%
Mustard greens	39%
Mushrooms	38%
Chinese cabbage	34%
Parsley	34%
Lettuce	34%
Green peas	30%
Zucchini	28%
Green beans	26%
Cucumbers	24%
Dandelion greens	24%
Green pepper	22%
Artichokes	22%
Cabbage	22%
Celery	21%
Eggplant	21%
Tomatoes	18%
Onions	16%
Beets	15%
Pumpkin	12%
Potatoes	11%
Yams	8%
Sweet potatoes	6%

GRAINS

Wheat germ	31%
Rye	20%
Wheat, hard red	17%
Wild rice	16%
Buckwheat	15%
Oatmeal	15%
Rye	14%
Millet	12%
Barley	11%
Brown Rice	8%

FRUITS

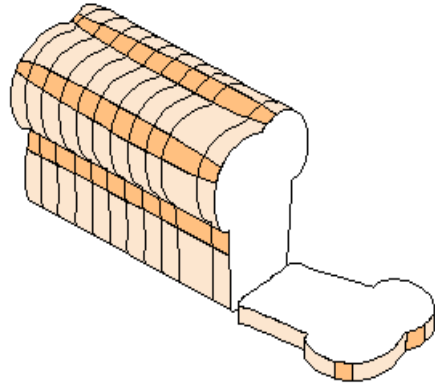
Lemons	16%
Honeydew melon	10%
Cantaloupe	9%
Strawberry	8%
Orange	8%
Blackberry	8%
Cherry	8%
Apricot	8%
Grape	8%
Watermelon	8%
Tangerine	7%
Papaya	6%
Peach	6%
Pear	5%
Banana	5%
Grapefruit	5%
Pineapple	3%
Apple	1%

NUTS AND SEEDS

Pumpkin seeds	21%
Peanuts	18%
Sunflower seeds	17%
Walnuts, black	13%
Sesame seeds	13%
Almonds	12%
Cashews	12%
Filberts	8%

Data obtained from "Nutritive Value
of American Foods in Common Units,"
U.S.D.A. Agriculture Handbook No. 456

Carbohydrates



- ◆ Carbohydrates are sugars and starches from plants
- ◆ Carbohydrates are the main energy source for anaerobic and high-intensity aerobic exercises of short duration
- ◆ Monosaccharides are simple carbohydrates, or sugars
- ◆ Polysaccharides are complex carbohydrates, or starches
- ◆ Whole-grain, high fiber starches help the body maintain normal blood-sugar levels

Carbohydrates

◆ Simple carbohydrates

- monosaccharides
- disaccharides

‘empty’ calories



◆ Complex carbohydrates

- starch
- dietary fiber

nutrient dense



Protein

- ◆ Proteins are composed of amino acids and contain nitrogen
- ◆ Of the 20 amino acids, nine are essential (not produced within the body and must be supplied by the diet)
- ◆ Complete proteins contain all essential amino acids; high-quality proteins contain the amino acids in the proportions needed by the body (usually found in meat and dairy foods)



Protein

- ◆ Incomplete proteins do not contain all of the essential amino acids in proportions needed (plant foods)
- ◆ Legumes, such as soy, are complete proteins
- ◆ Most people require 0.36 grams per pound of body weight of protein daily
- ◆ Excess protein is stored as fat; high protein intake strains the kidneys and causes the body to excrete calcium



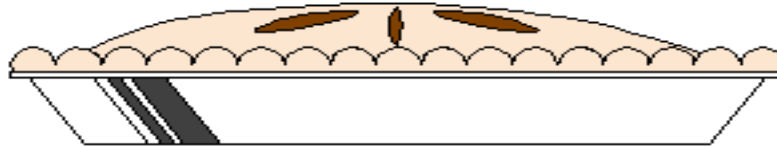
Frances Moore Lappé

- ◆ When I first wrote *Diet for a Small Planet* in 1971, I stressed protein complementarity because I assumed that the only way to get enough protein was to create a protein as usable by the body as animal protein.
- ◆ In combatting the myth that meat is the only way to get high quality protein, I reinforced another myth.



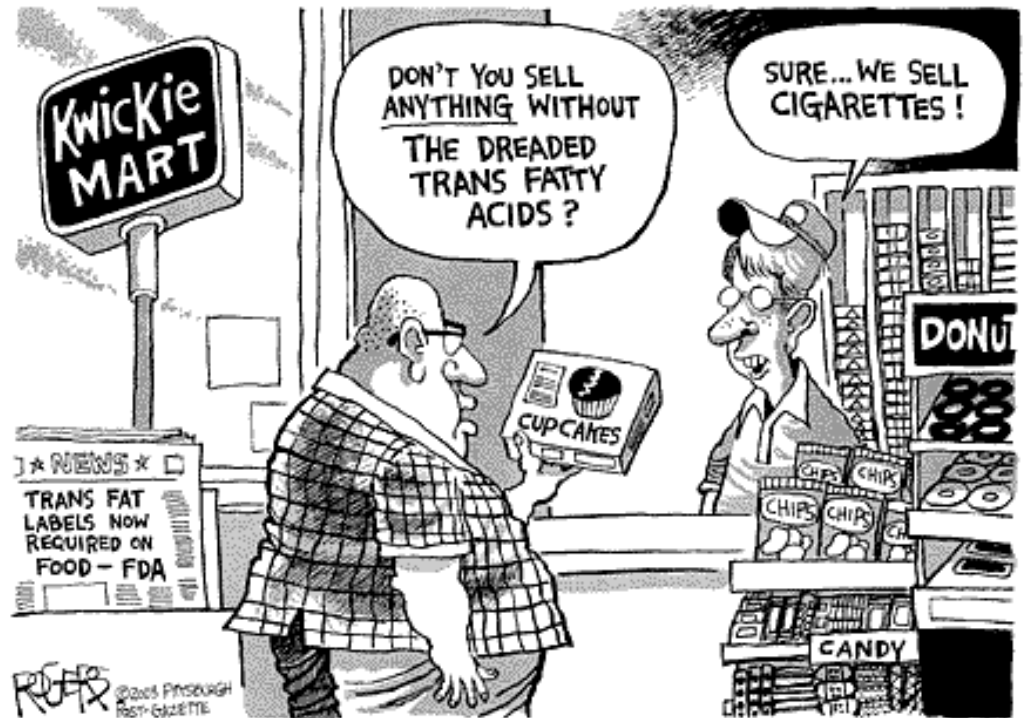
Fat

- ◆ Fats (lipids) are composed of chains of carbon atoms with hydrogen atoms attached
- ◆ Saturated fats carry all the hydrogen atoms they can
- ◆ Monounsaturated fats have room for two hydrogen atoms
- ◆ Polyunsaturated fats have room for four or more hydrogen atoms



Trans Fatty Acids

- ◆ Hydrogenated products have hydrogen atoms added into them so they are more resistant to spoilage (and more saturated)
- ◆ Hydrogenation yields a new type of fat called Trans Fatty acids



Olestra

- ◆ Olestra is a synthetic fat that cannot be digested, so it has no calories



Fat Substitutes

Motor oil also cannot be digested by the body.

Maybe we should use motor oil as a fat substitute!



Fat

- ◆ Cholesterol is found only in animal products
- ◆ The body requires 3 calories to digest 100 calories of dietary fat but 23 to 27 calories to digest 100 calories of carbohydrates
- ◆ Dietary fat intake should be less than 30% of the total diet, and should be low in saturated fat
- ◆ Fat intake in excess of 30% is consistently associated with heart disease

Fat

- ◆ Many experts maintain that the total amount of dietary fat intake is not as important as the type of fat that is eaten
- ◆ Fat is the major fuel source for low-intensity exercise of long duration
- ◆ In order to decrease the risk of heart disease, we should substitute monounsaturated and polyunsaturated fats for saturated fat
- ◆ Consumption of Trans Fatty acids should be held to a minimum

Vitamins

- ◆ Vitamins are organic compounds necessary in small amounts for good health; they do not supply energy
- ◆ Fat-soluble vitamins include A, D, E, and K. Excess amounts are stored in the liver and fat cells
- ◆ Antioxidant vitamins (C, E, and carotenoids) help neutralize the activity of free radicals
- ◆ Free radicals cause cellular damage that may lead to cancer and heart disease

Vitamins

- ◆ With advancing age, some people do not produce sufficient stomach acid to obtain vitamin B12 from their food. Since there are no plant sources for B12, vegans should take a B12 supplement.
- ◆ Folate helps to prevent neurological birth defects, and helps to inhibit homocysteine.
- ◆ High homocysteine is thought to make artery walls sticky and promote plaque formation.
- ◆ Therefore folate supplementation may help prevent heart disease.

Nature vs. Nurture (epigenetics)



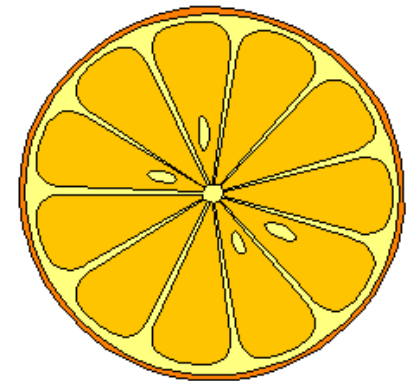
These two 'agouti' mice are genetically identical. The mother of the mouse on the right was supplemented with B12, folic acid and choline.

Vitamin C

- ◆ Vitamin C is not a vitamin for most animals
- ◆ If we could make our own Vitamin C as other animals do, a 150 pound person would self manufacture 8,000 – 10,000 mg of Vitamin C per day
- ◆ This is under normal circumstances. When the animal is under stress or healing from infection or injury, the animal will double or triple this amount
- ◆ Smokers – Vitamin C is a key nutrient for smokers

Vitamins Supplements

- ◆ The orthodox view is that healthy adults who eat a variety of foods do not need vitamin supplements
- ◆ Exceptions for specific supplements might include people who are 65 or older; consume fewer than 1000 calories per day; have a digestive tract disease; smoke; drink alcohol excessively; are pregnant or lactating; are vegetarians



Minerals

- ◆ Minerals are inorganic compounds that fulfill a variety of functions in the body
- ◆ Macrominerals (major minerals) are required in large amounts—more than 100 mg/day
- ◆ Microminerals (trace minerals) are required in small amounts—less than 100 mg/day
- ◆ Calcium is the mineral most commonly deficient, especially in women

Minerals

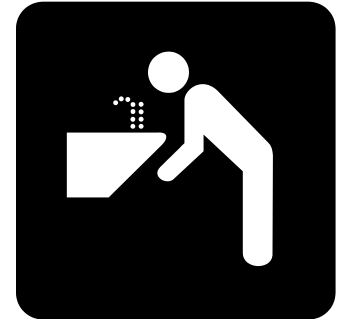
◆ Macro minerals

- calcium
- phosphorus
- potassium
- sodium
- magnesium

◆ Trace minerals

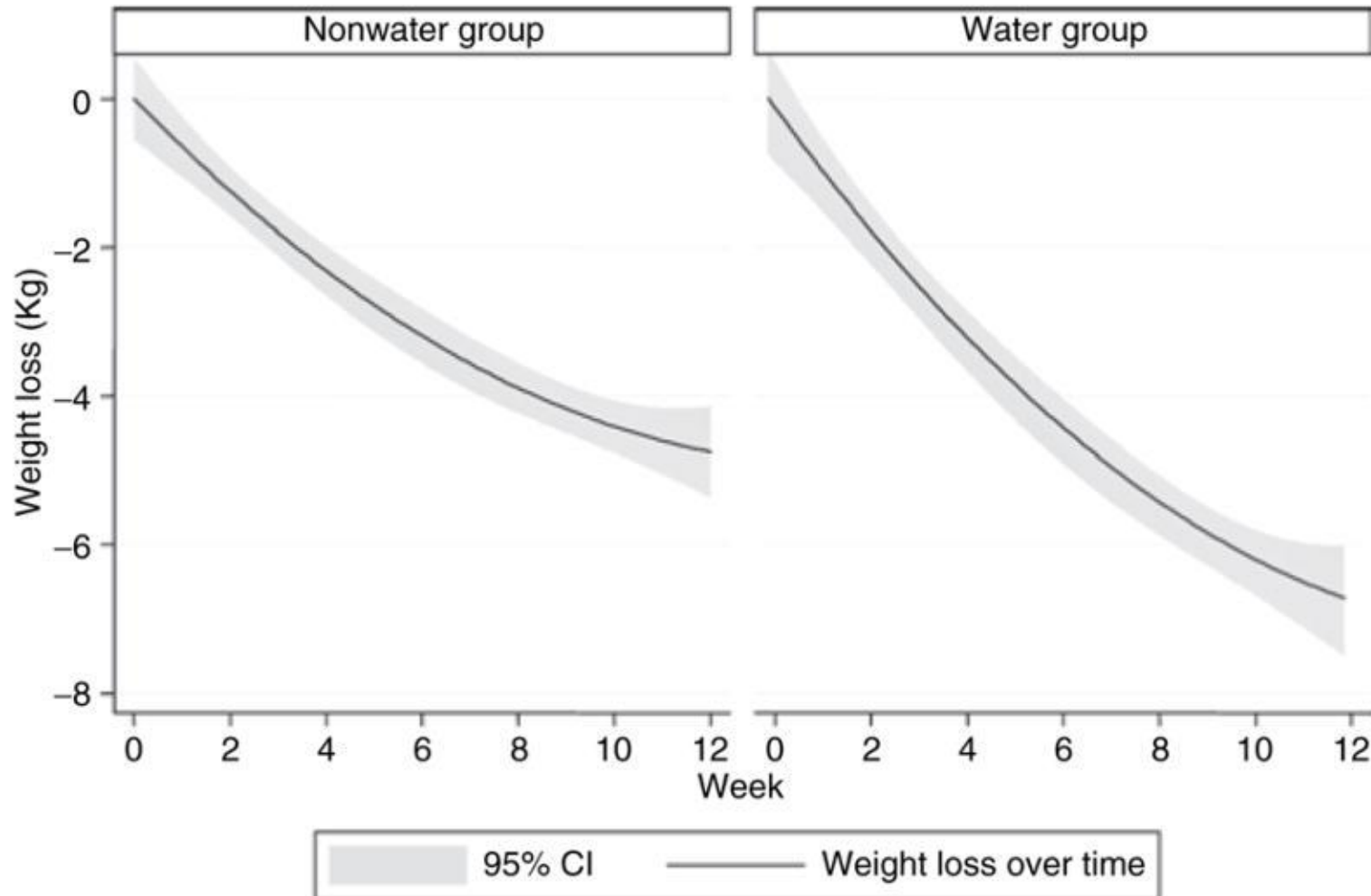
- iron
- zinc
- chromium
- selenium
- copper
- manganese

Water

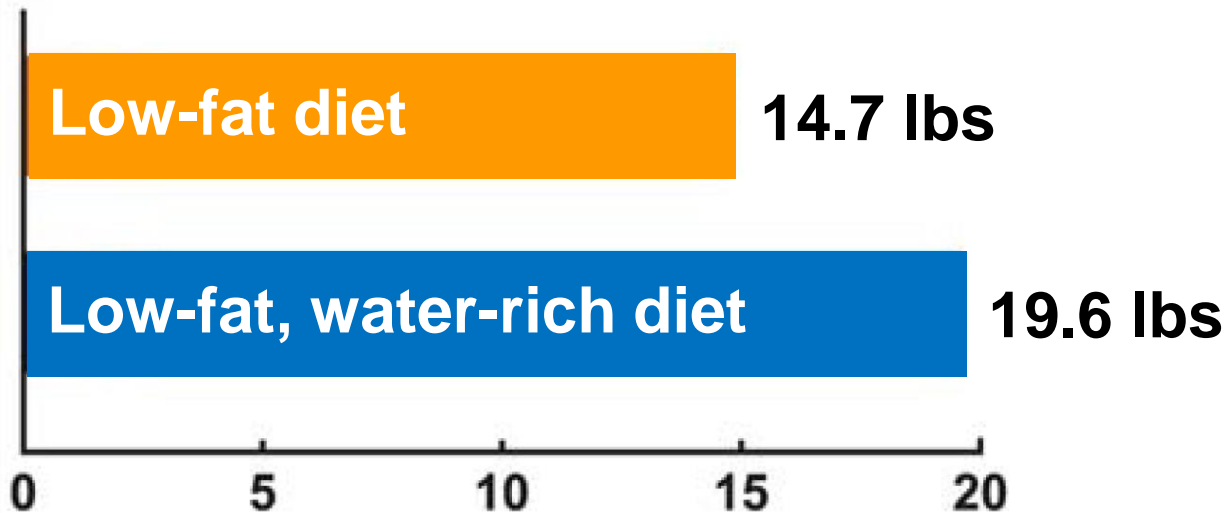


- ◆ Next to air, water is the substance most necessary for survival
- ◆ Sixty percent of the body's weight is water
- ◆ Recommended daily fluid intake is 8 to 12 cups—preferably water (not coffee, juice, etc.)
- ◆ If you are thirsty, your body has already lost too much fluid
- ◆ The greater the caloric expenditure per day, the greater the water requirement
- ◆ One guideline is 1 ounce of water for each two pounds of body weight, e.g. 80 oz for 160 lb person

Water Intake and Weight Loss



Water Intake and Weight Loss



Incorporating water-rich foods such as fruit and vegetables into the diet reduces dietary energy density because water adds weight and volume to food without adding energy. For the same number of calories, individuals can eat a greater weight of food, and may experience less hunger than do individuals following a diet that restricts portions.

Other Nutrients

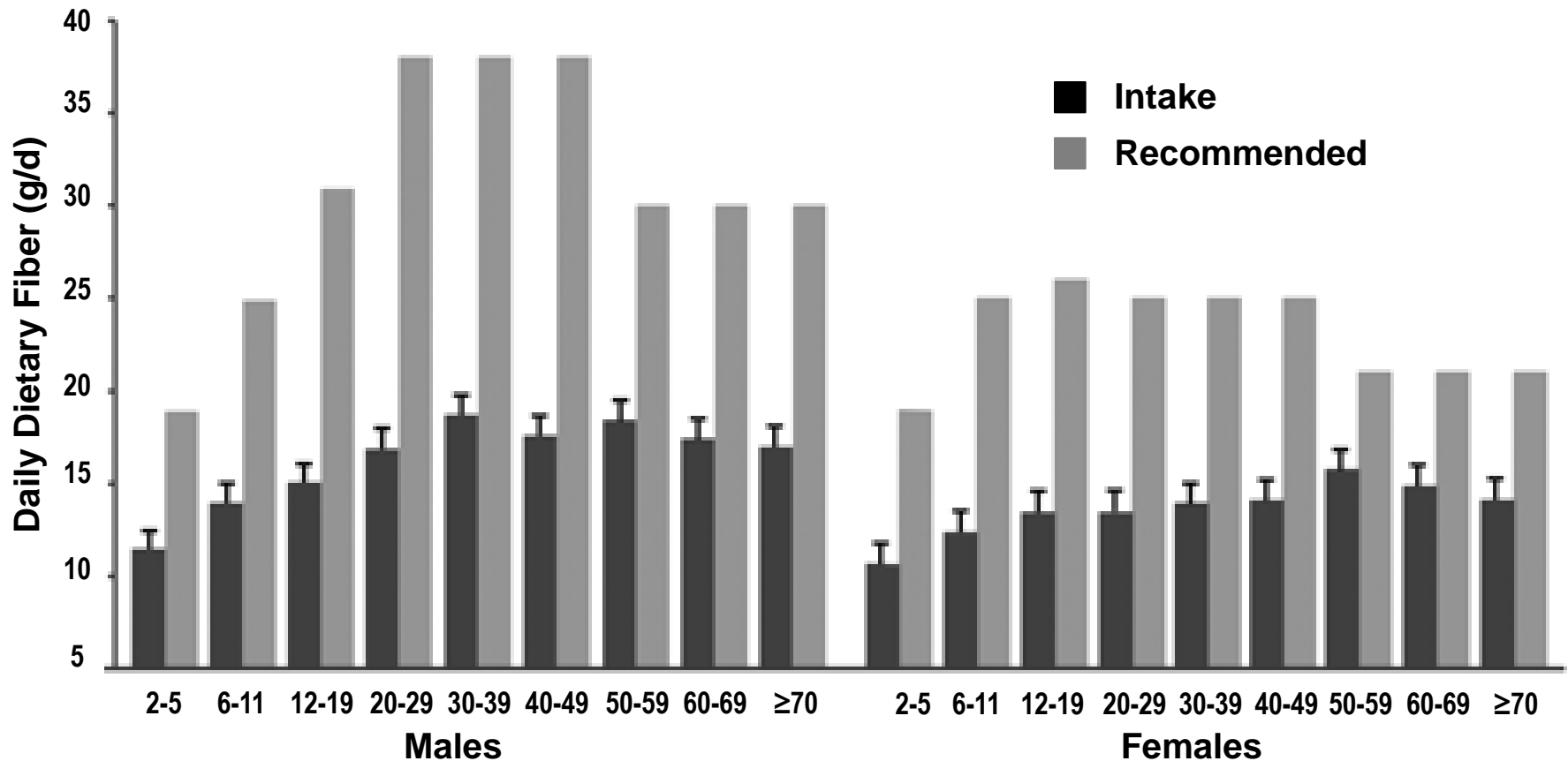
- ◆ Phytochemicals are active compounds that exist naturally in all plant foods
- ◆ Botanicals (phytomedicinals), usually called *herbs*, are considered dietary supplements and are not regulated by the FDA



Fiber

- ◆ Americans consume 14–15 grams of fiber per day
- ◆ 25–30 grams of fiber should be included in the daily diet
- ◆ Soluble fiber, such as oat bran, lowers blood cholesterol
- ◆ Insoluble fiber, such as prunes, adds bulk and speeds transit time through the large and small intestines


American Fiber Intake Gap



Functional Foods

- ◆ Functional foods refer to foods with additives that provide specific health benefits above and beyond their inherent nutritional value.
 - Vitamin D fortified milk
 - Calcium fortified orange juice
 - Eggs fortified with omega-3 fatty acids
 - Grain products fortified with folate

HBO – The Weight of the Nation



A nutrition label from the HBO documentary 'The Weight of the Nation'. The label is tilted and features a pat of butter placed over it. The label lists the following nutrients and their percentages of daily values:

	% Daily Value*
Total Fat 16 g	30 %
Saturated Fat 6 g	21 %
Trans Fat 1 g	
Cholesterol 1 mg	33 %
Sodium 6 mg	30 %
Total Carbohydrate 15 g	29 %
Dietary Fiber 4 g	21 %

HBO

Standard American Diet (SAD)

◆ Deficiencies of the typical diet

- Iron
- Calcium
- Fiber

◆ Common Excesses

- Sugar
- Saturated fat
- Salt

HBO – The Weight of the Nation



www.youtube.com/watch?v=5zed4oL-roE&hd=1

Sugar Consumption in England from 1815 to 1970

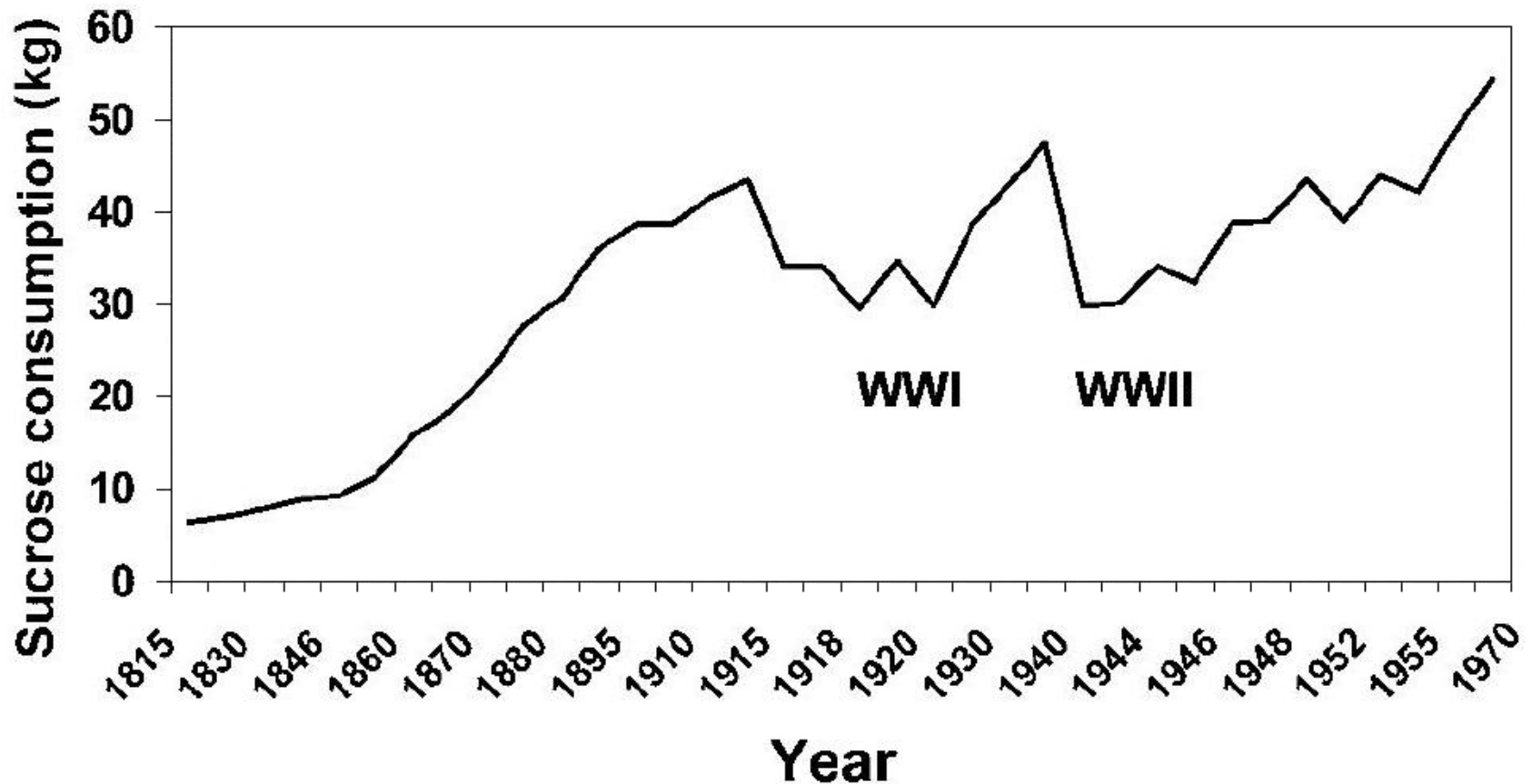
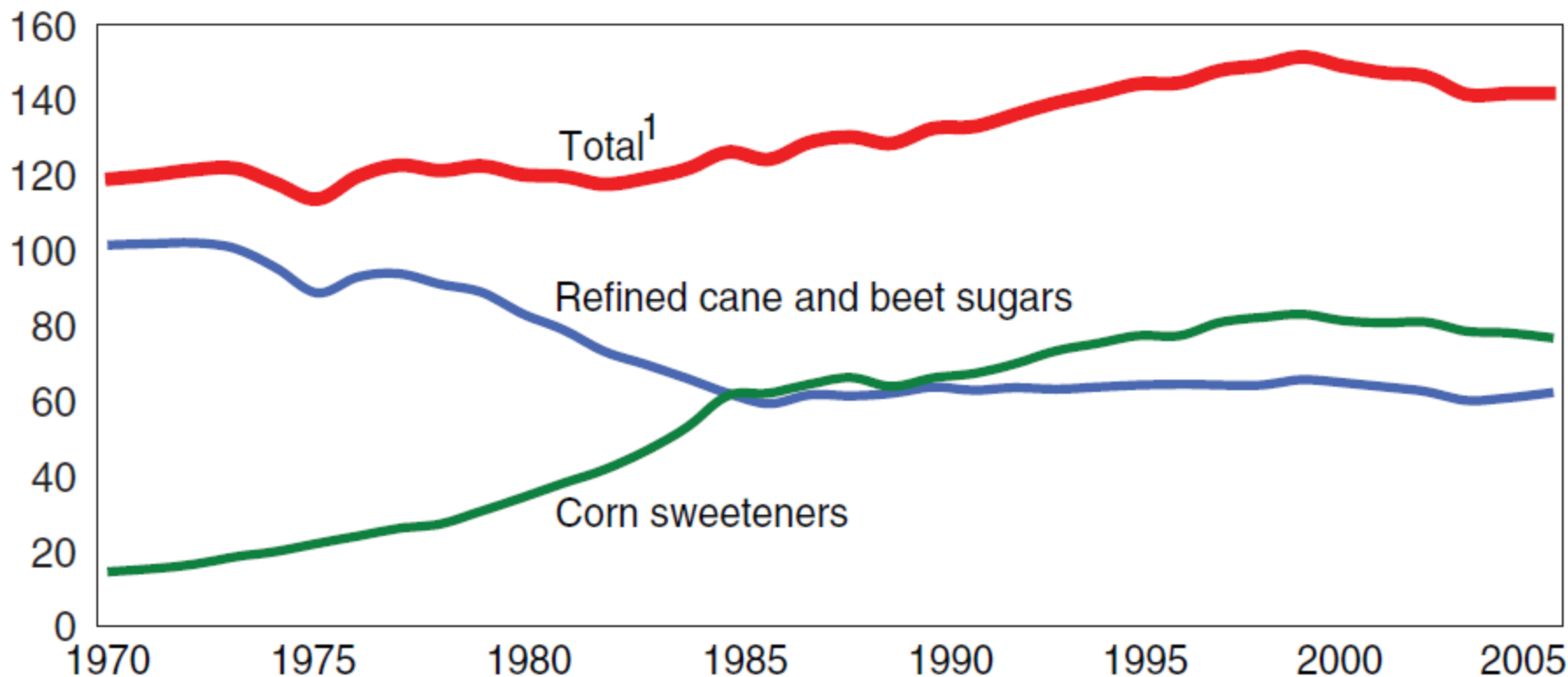


FIGURE 2. Per capita consumption of sucrose in England from 1815 to 1970. WWI, World War I; WWII, World War II. Adapted from Cleave (38).

Corn sweetener consumption increased 387 percent between 1970 and 2005

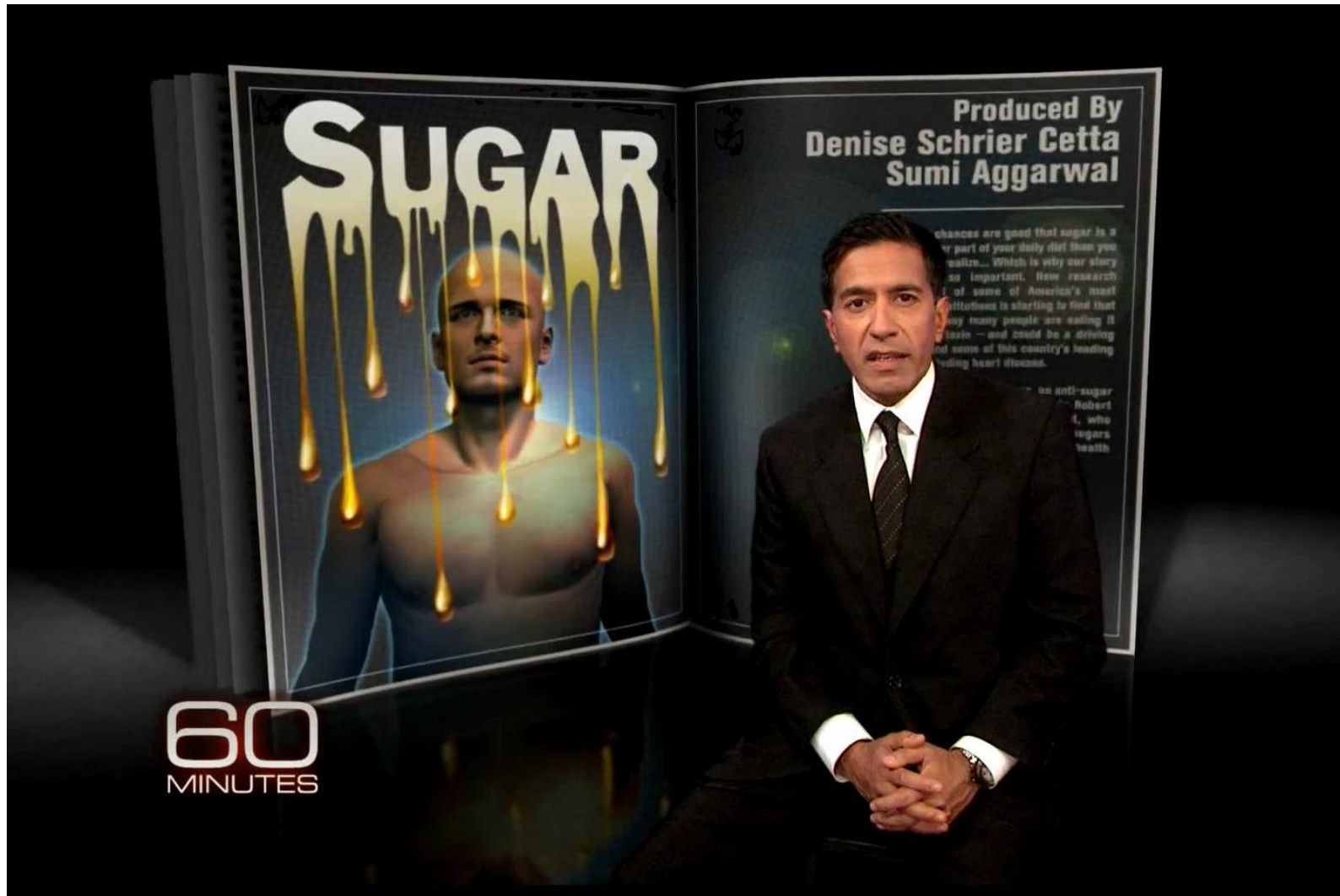
Pounds per person, dry-weight equivalent



¹Includes honey, maple, and sugarcane syrup, edible molasses, and edible refiners' syrup.

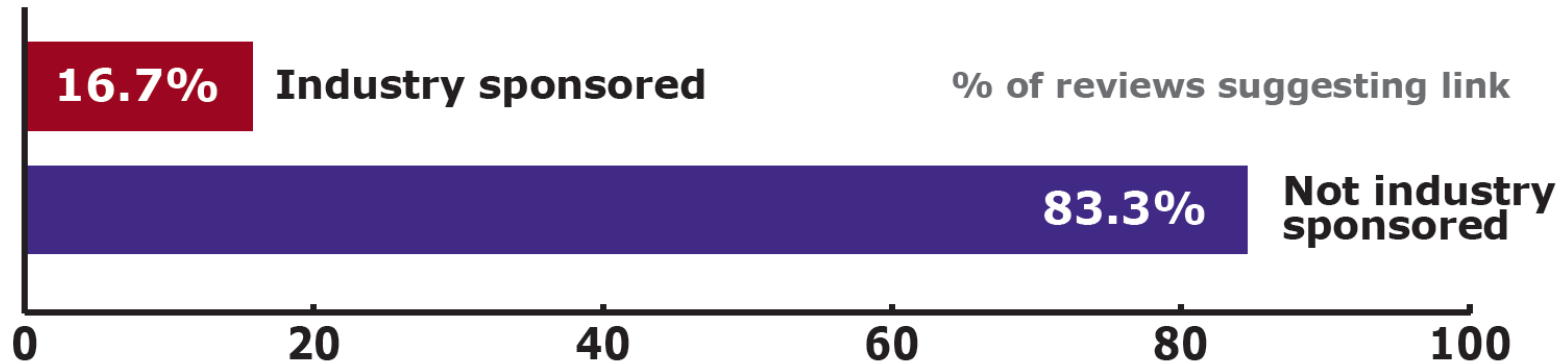
Source: USDA, ERS Food Availability (Per Capita) Data System.

Is Sugar Toxic? – 60 minutes (4-1-12)



http://www.youtube.com/watch?v=USr_2keuckl&hd=1

A Financial Incentive to Mislead?



**10 of 12 reviews without industry funding suggested a link between beverage intake and weight gain / obesity, compared to only 1 of 6 reviews with industry funding.*

CONCLUSIONS: Financial conflicts of interest may bias conclusions from published systematic reviews on sugar-sweetened beverages consumption and weight gain or obesity.

Financial conflicts of interest and reporting bias regarding the association between sugar-sweetened beverages and weight gain PLoS Med. 12-10-13
<http://www.ncbi.nlm.nih.gov/pubmed/24391479>

Effects of HFCS Beverages

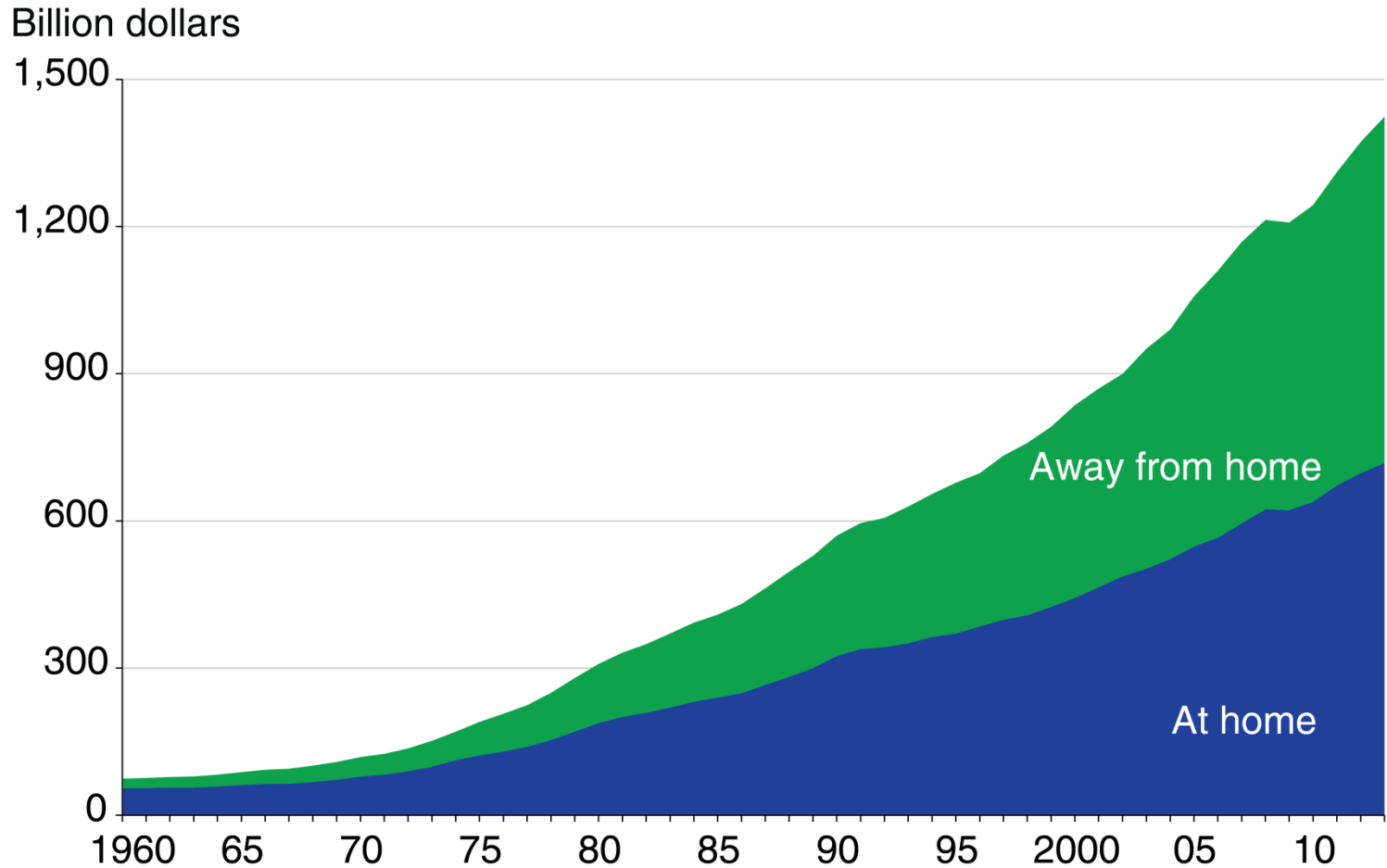
- ◆ Results from both short-term and long-term studies show that fructose consumption results in decreased circulating levels of insulin and leptin when compared with glucose.
- ◆ Because insulin and leptin function as key signals to the central nervous system in the long-term regulation of energy balance, prolonged consumption of diets high in energy from fructose could lead to increased caloric intake or decreased caloric expenditure, thereby contributing to weight gain and obesity.

Endocrine and metabolic effects of consuming beverages sweetened with fructose, glucose, sucrose, or high-fructose corn syrup. Stanhope Am J Clin Nutr 2008
<http://www.ncbi.nlm.nih.gov/pubmed/19064538>

Changes in American Eating Patterns

- ◆ Family meals at home are being replaced by a quick-stop, eat-on-the-go trend.
- ◆ Eating quickly, independent of total energy intake, is associated with becoming overweight
- ◆ Nearly one-half of Americans eat away from home each day.
- ◆ In addition to dining out, many also skip meals.
- ◆ One-fourth of adults skip breakfast, which contributes to the mid-morning sluggishness common among students.

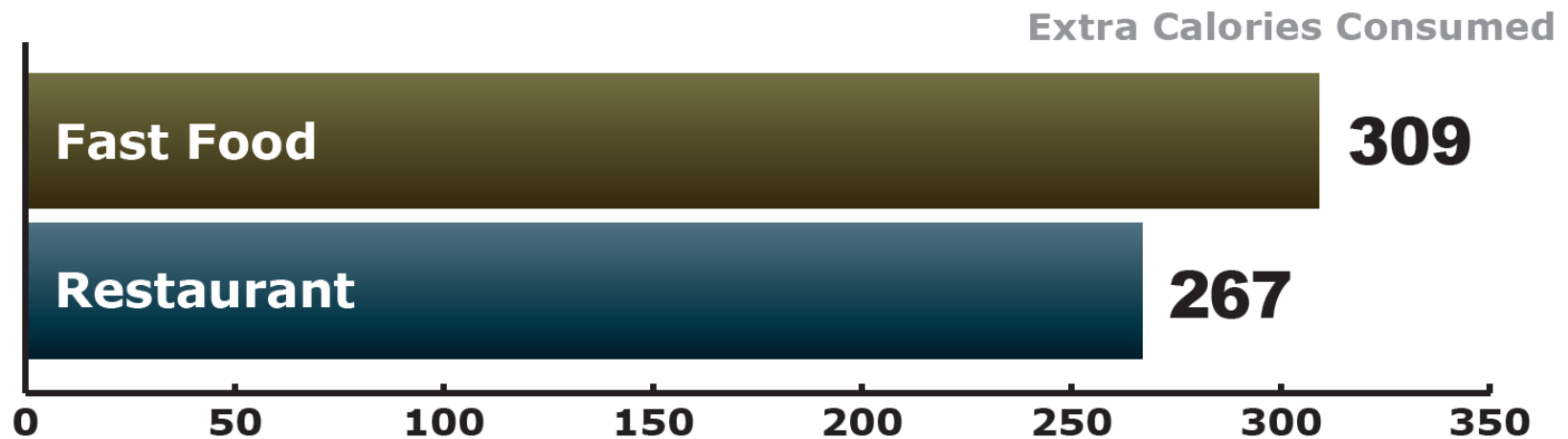
U.S. food at home and away from home expenditures, 1960–2013



Source: USDA, Economic Research Service, Food Expenditure Series

Adolescent Eating Patterns

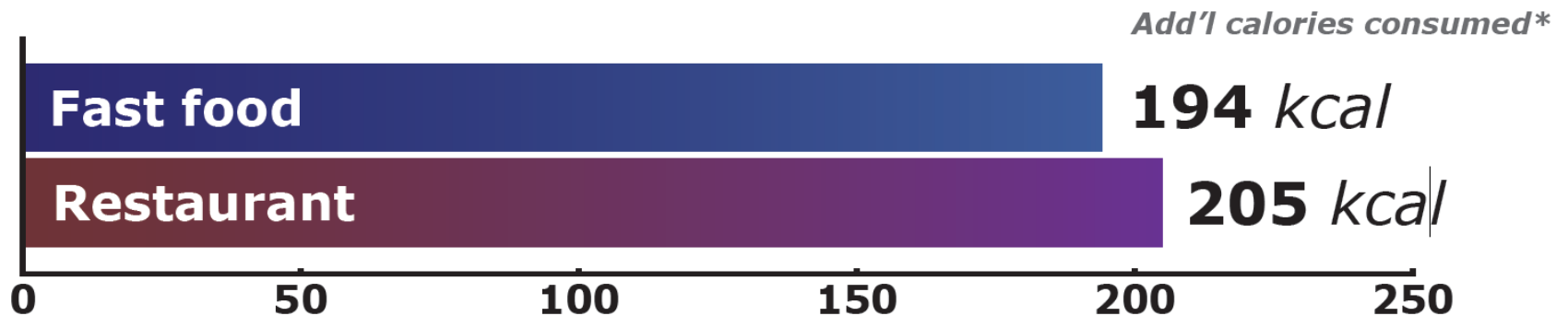
Fast-food and full-service restaurant consumption is associated with higher net total energy intake and poorer diet quality



**Extra daily calories consumed compared to days they did not eat out.*

Adult Eating Patterns

Adults' fast-food and full-service restaurant consumption was associated with higher daily total energy intake and poorer dietary indicators

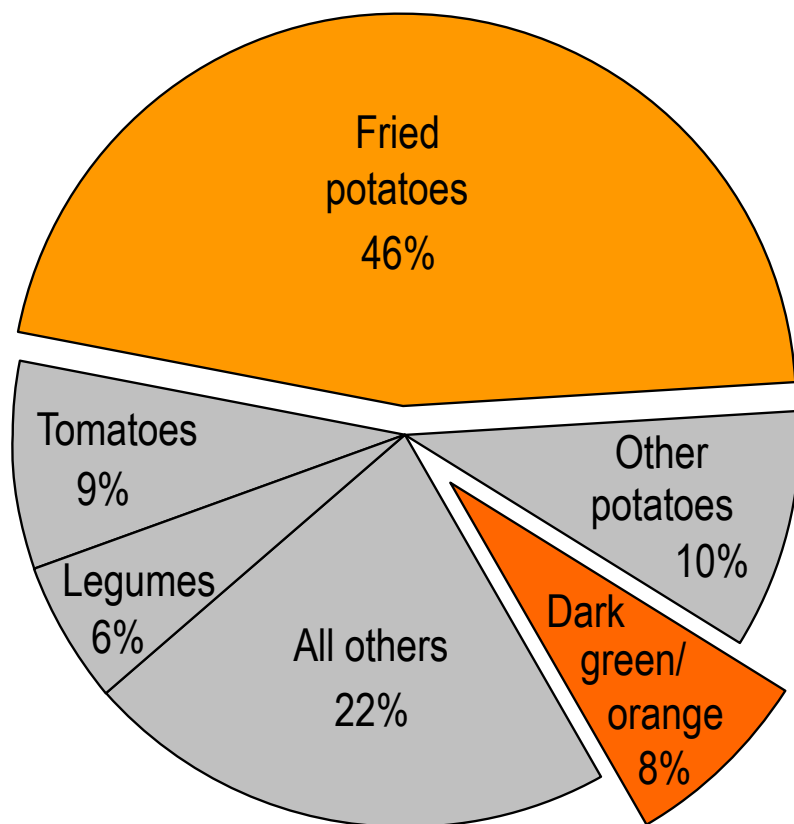


**The study measured kcals consumed, equivalent to calories in terms of food labels / energy expenditure.*

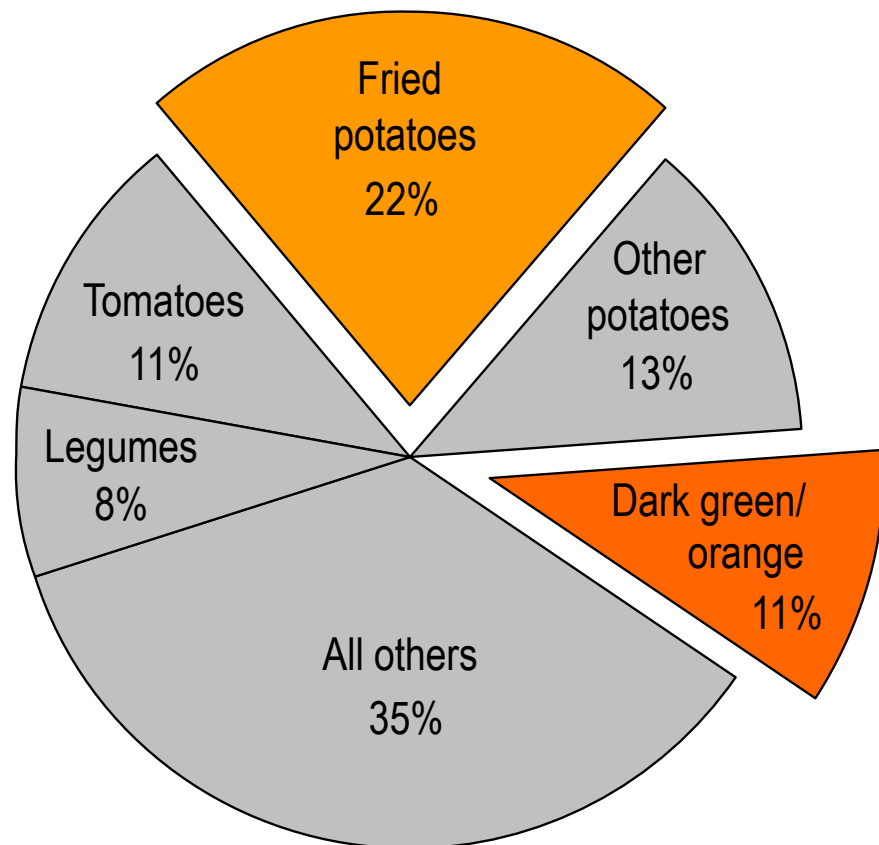
The impact of restaurant consumption among US adults: effects on energy and nutrient intakes.

Public Health Nutr. 17(11):2445–52. <http://www.ncbi.nlm.nih.gov/pubmed/25076113>

Proportion of Vegetable Servings, 1999–2000

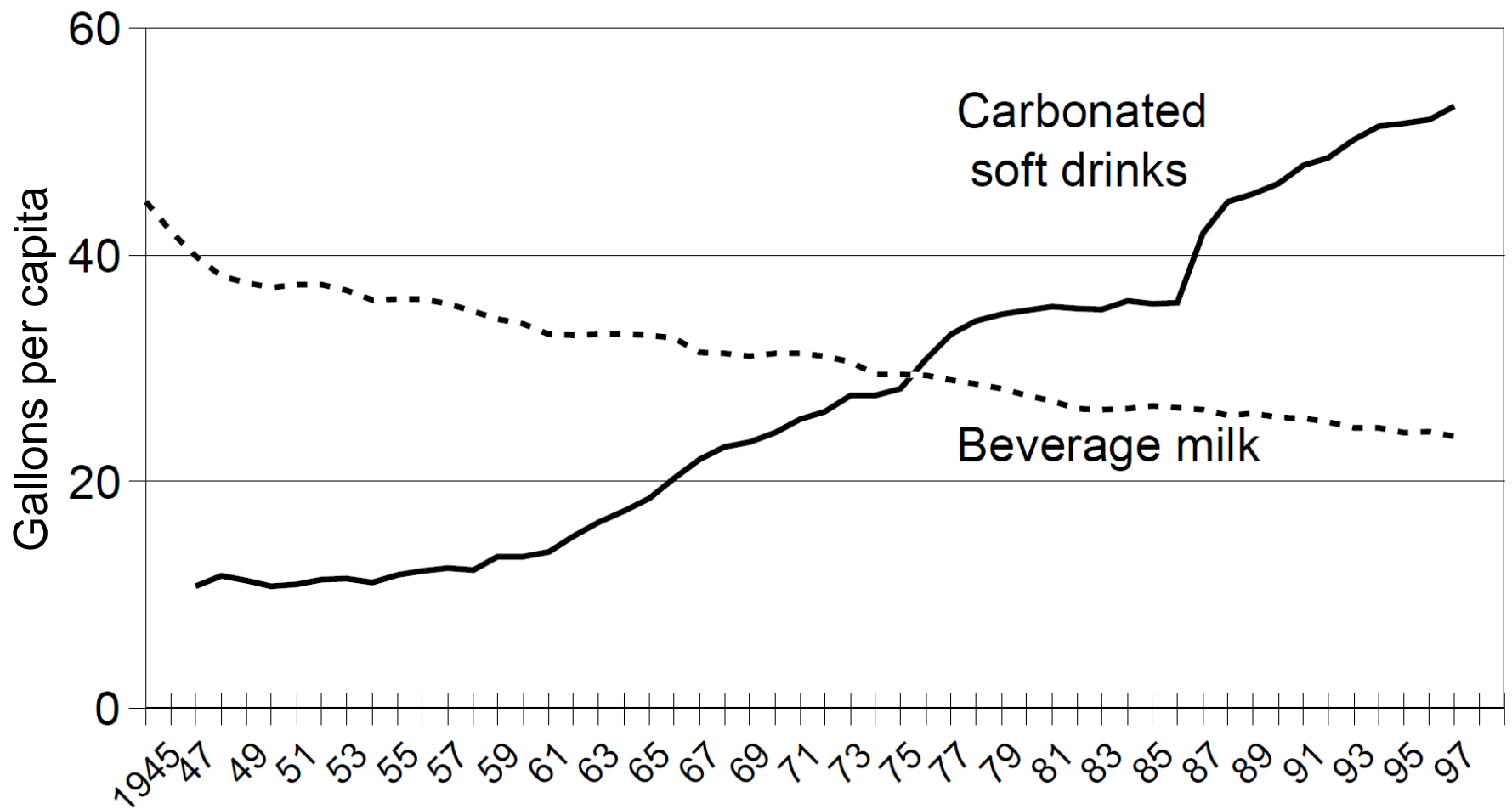


Children 2–19 years



Adults 20 years and over

Target = At least one-third dark green/orange



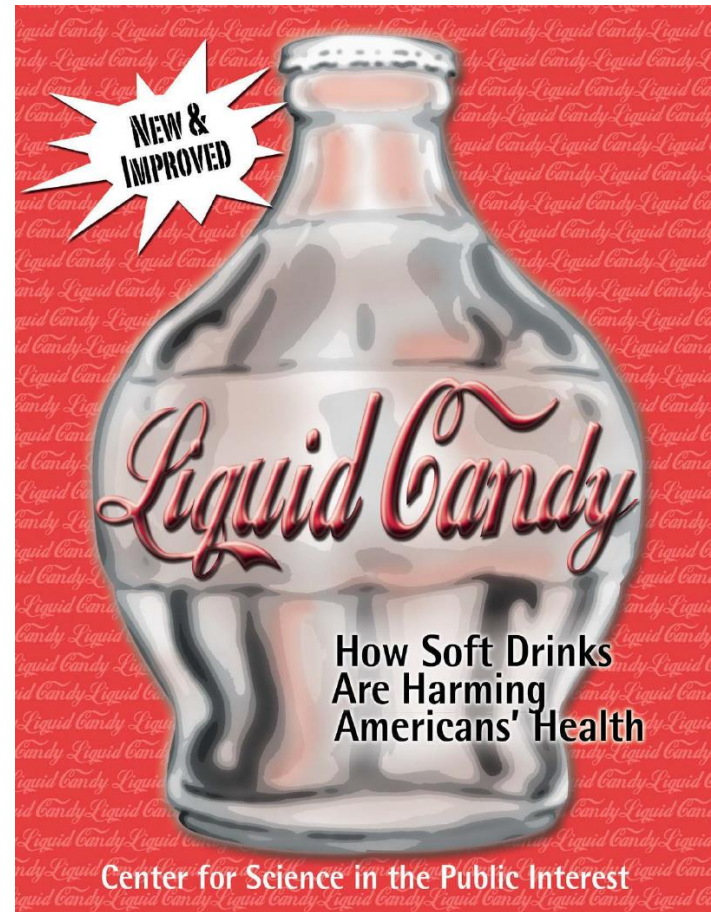
In 1945, Americans drank more than four times as much milk as carbonated soft drinks. In 1997, they downed nearly two and a half times more soda than milk.

Liquid Candy

In 1942, U.S. annual production of carbonated soft drinks was about 60 12-ounce servings per person.

Today, companies annually produce enough soda pop to provide 557 12-ounce cans (52.4 gallons) for every man, woman, and child.

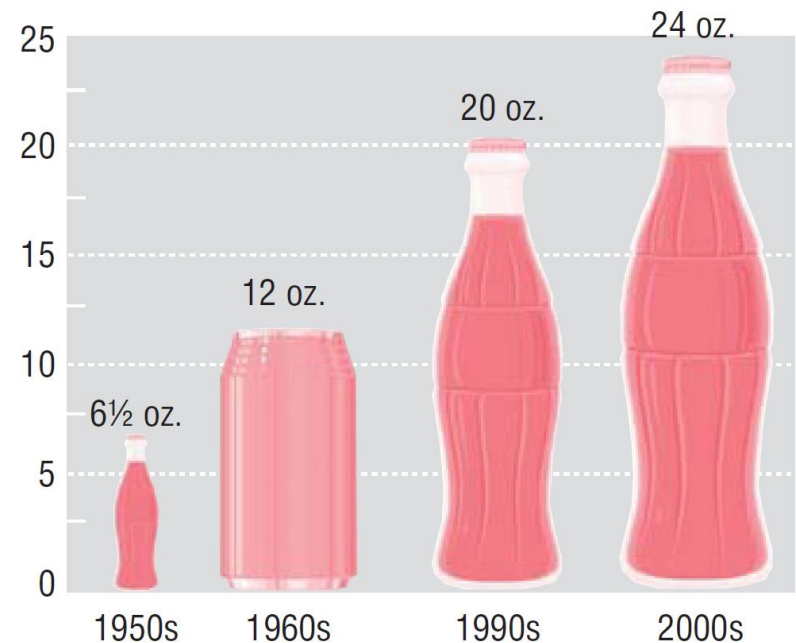
Carbonated soft drinks are now the single biggest source of calories in the American diet, providing about 7 percent of calories.



Growth in Soda Container Size

One reason for increased consumption is that the industry has steadily increased container sizes.

In the 1950s, Coca-Cola's 6½-ounce bottle was the standard serving. That grew into the 12-ounce can, and now that is being supplanted by 20-ounce bottles and products such as the 64-ounce Double Gulp at 7-Eleven stores.



The No-Diet Weight Loss Solution!

EAT THIS

Thousands of simple
food swaps that can save you
10, 20, 30 pounds—or more!



Big Mac®
540 Calories
29 g fat



Whopper® with cheese
760 Calories
47 g fat

NOT THAT!

BY DAVID ZINCZENKO
Editor-in-Chief of **Men's Health**,
WITH MATT GOULDING

10 Foods You Should Never Eat!

1. Artery Crust

Judging by the label, **Pepperidge Farm Roasted White Meat Chicken Premium Pot Pie** has 510 calories and 9 grams of saturated fat. But look again. Those numbers are for half a pie. Eat the entire pie, as most people probably do, and you're talking more than 1,000 calories and 18 grams of sat fat. Then add the 13 grams of hidden trans fat (from the partially hydrogenated vegetable shortening) in each pie and you're up to 31 grams of artery-clogging fat — that's far more than a day's allotment.

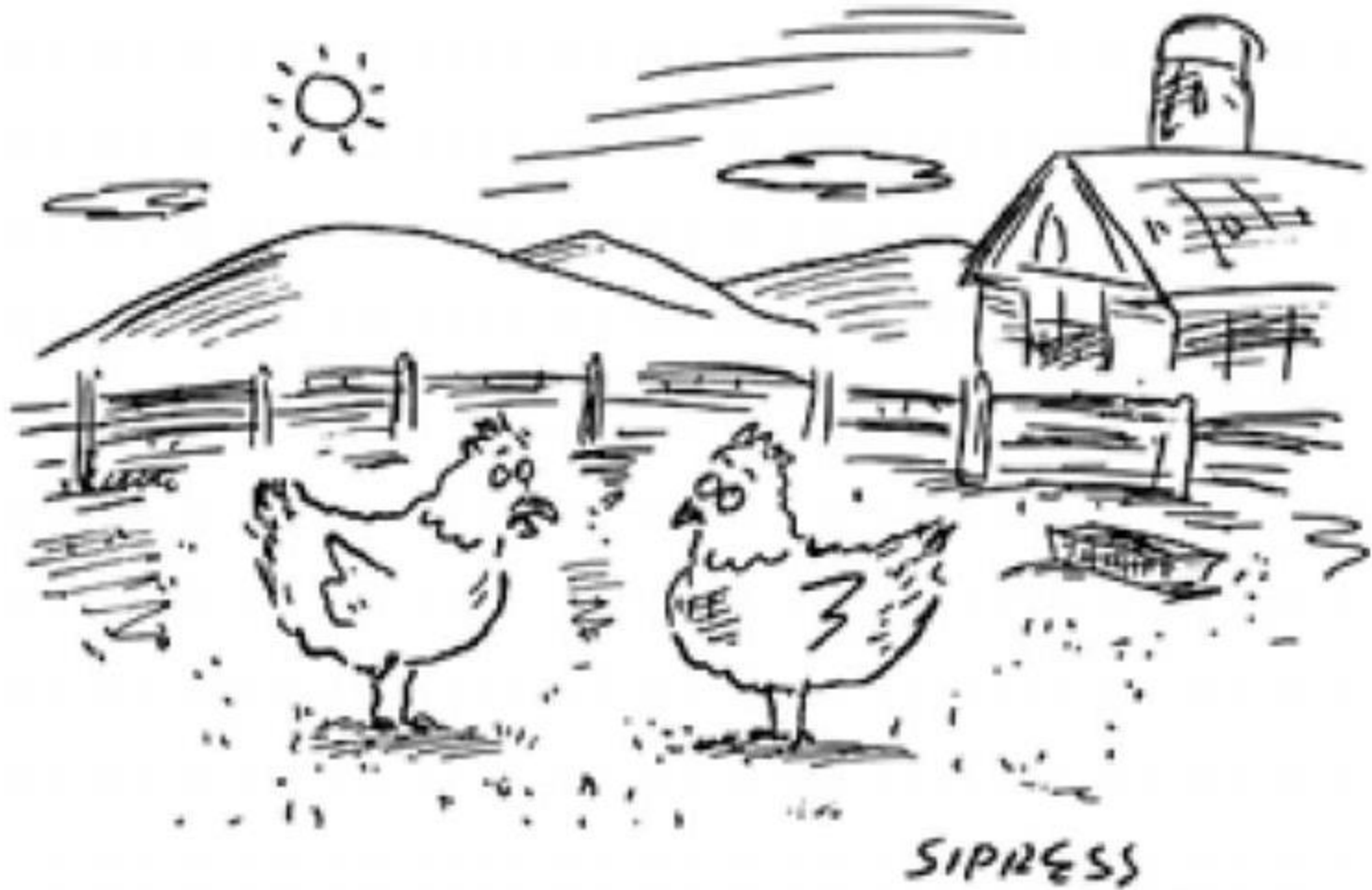


10 Foods You Should Never Eat!

2. Strip Tease

McDonald's Chicken Selects Premium Breast Strips sounds healthy. In fact, ounce for ounce, the Selects are no healthier than the chain's Chicken McNuggets. A standard, five-strip order has 630 calories and 11 grams of artery-clogging fat. That's about the same as a Big Mac, except the burger has 1,040 mg of sodium, while the Selects hit 1,550 mg, even without the salty sauce.





"Here's what I don't get – we don't even have fingers."

Guess What's in the Picture



A. Strawberry Ice Cream
B. Plastic Foam

C. Chicken
D. None of the above

Folks, this is mechanically separated chicken, an invention of the late 20th century. Someone figured out in the 1960's that meat processors can eek out a few more percent of profit from chickens, turkeys, pigs, and cows by scraping the bones 100% clean of meat. This is done by machines, not humans, by passing bones leftover after the initial cutting through a high pressure sieve. The paste you see in the picture above is the result.

This paste goes on to become the main ingredient in many a hot dog, bologna, chicken nuggets, pepperoni, salami, jerky etc...

The industry calls this method AMR – Advanced Meat Recovery.

In 2004, as a result of mad cow disease (Bovine Spongiform Encephalopathy), the USDA's Food Safety and Inspection Service (FSIS) ruled that beef could no longer be processed this way, because testing showed that parts of the bovine central nervous system ended up in the meat.

10 Foods You Should Never Eat!

3. Factory Reject

Each slice of The Cheesecake Factory's 6 Carb Cheesecake has 610 calories – that's the same as you'd get from a slice of its Original Cheesecake. Think of it as an 8-ounce prime rib for dessert — with 29 grams of saturated fat, a 1½ days' supply. The next time you step on the bathroom scale, you may never know that the carbs were missing.



10 Foods You Should Never Eat!

4. Everlasting Dove

Dove squeezes some 300 calories and an average of 11 grams of saturated fat (half-a-day's worth) into a tennis-ball size serving (half a cup) of its **Dove Ice Cream**. That puts it in the same ballpark as Ben & Jerry's and Häagen-Dazs. With names like "Unconditional Chocolate," Dove is trying to link chocolate with romance. A scoop of its ice cream will fill your heart all right ... but not with love.



10 Foods You Should Never Eat!

5. Starbucks on Steroids

The Starbucks Venti (20 oz.) Caffè Mocha with whipped cream is more than a mere cup of coffee. Think of it as a Quarter Pounder with Cheese in a cup. Few people have room in their diets for the 490 calories and 16 grams of bad fat that this hefty beverage supplies. But you can lose all the bad fat and all but 170 calories if you order a tall (12 oz.) with nonfat milk and no whipped cream.



10 Foods You Should Never Eat!

6. Angioplasty

“Fresh, pulled white meat chicken, fresh steamed broccoli and penne pasta, tossed in parmesan cream sauce. Topped with Wisconsin cheddar cheese, then baked,” says **Ruby Tuesday’s** menu entry for its **Fresh Chicken & Broccoli Pasta**. Some patrons may know that the cheese and cream add saturated fat, but how much harm could they do? Enough to turn the dish into a 2,060-calorie megameal with 128 grams of fat. Since the fat is mostly dairy, roughly 60 to 70 of those fat grams are probably saturated. To equal 2,060 calories, you’d have to swallow two sirloin steak dinners — each with Caesar salad and buttered baked potato.



10 Foods You Should Never Eat!

7. Snack Attack

Unless you're suicidal, why on earth would you want to wolf down a **Burger King Quad Stacker** – 4 hamburger patties, 4 slices of cheese, 8 strips of bacon, plus sauce and a bun? That's half-a-day's calories (1,000), one-and-a-half-days' worth of saturated fat (30 grams), 3 grams of trans fat, and more than a day's sodium (1,800 mg). Urp!



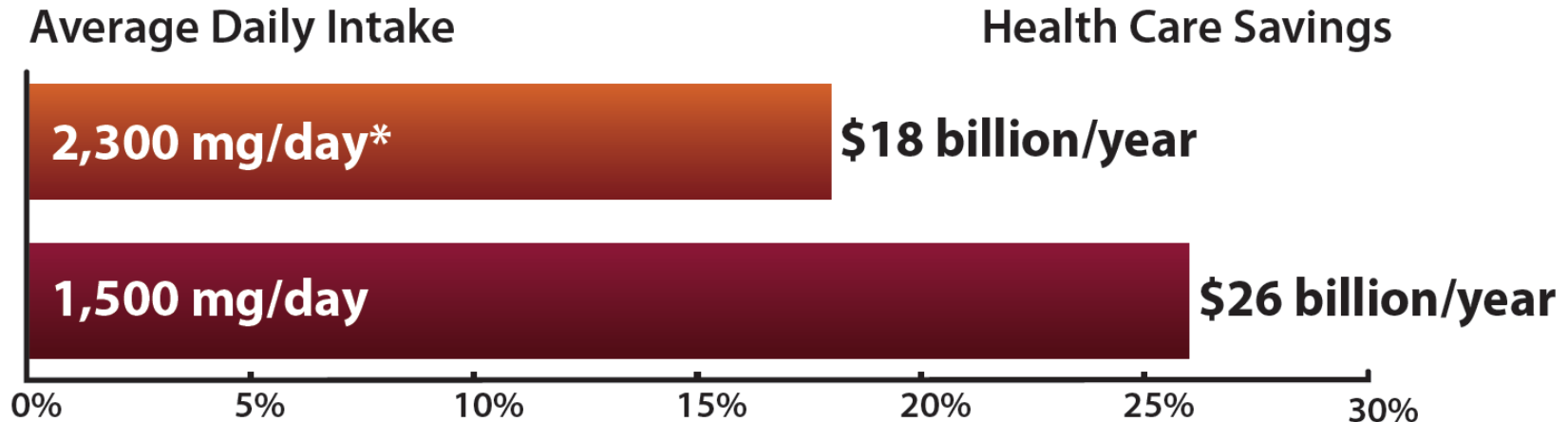
10 Foods You Should Never Eat!

8. Salt's On!

Campbell's Chunky, Select, and red-and-white-label condensed soups are brimming with salt: Half a can averages more than half of a person's daily quota of salt. Instead, try brands like Healthy Choice and Campbell's Healthy Request, which have about half as much sodium.



Cut Out the Salt, Save Billions



*2,300 mg is the current recommended daily limit.

US average sodium consumption is 3,400 mg/day

CONCLUSIONS: Large benefits to society may result from efforts to lower sodium consumption on a population level by modest amounts over time. Although savings in direct health care costs are likely to be quite high, they could easily be matched or exceeded by the value of quality-of-life improvements.

10 Foods You Should Never Eat!

9. Tortilla Terror

Interested in a **Chipotle Chicken Burrito** (tortilla, rice, pinto beans, cheese, chicken, sour cream, and salsa)? Think of its 1,180 calories and 19 grams of saturated fat as three 6-inch Subway Steak and Cheese Subs. Plus, it has 2,900 mg of sodium! Getting the burrito with no cheese or sour cream cuts the saturated fat by two-thirds, but you still end up with 950 calories and 2,690 mg of sodium. Yikes!



10 Foods You Should Never Eat!

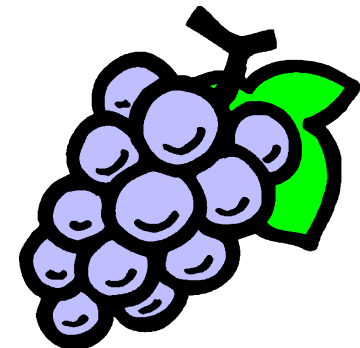
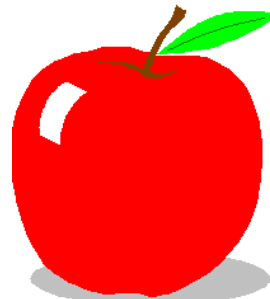
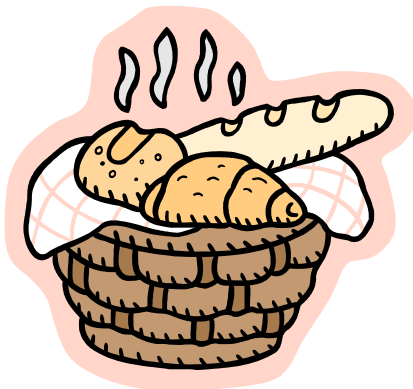
10. Razzle, Dazzle 'em

A Mint Chip Dazzler at Häagen-Dazs stores (three scoops of ice cream, hot fudge, Oreos, chocolate sprinkles, and whipped cream) has 1,270 calories and 38 grams of saturated fat — that's two days' worth. Think of it as a T-bone steak with Caesar salad, and baked potato with sour cream. But that's for dinner — yet many people have a Dazzler as a dessert after lunch or dinner!



Dietary Guidelines for Americans

- ◆ Eat a variety of foods
(see ChooseMyPlate.gov)
- ◆ Balance food intake with physical activity;
maintain or improve your weight
- ◆ Choose a diet with plenty of grain products,
vegetables, and fruits



Dietary Guidelines for Americans

- ◆ Choose a diet low in fat, saturated fat, and cholesterol
- ◆ Choose a diet moderate in sugars (no more than 10% of total calories)
- ◆ Choose a diet moderate in salt and sodium
- ◆ Drink alcoholic beverages in moderation:
 - one drink per day for women
 - two drinks per day for men



Recommendations of the United States Senate Select Committee on Nutrition and Human Needs (1977)

- ◆ Increase consumption of fruits, vegetables, whole grains and legume products.
- ◆ Decrease consumption of red meat and increase consumption of fish and poultry without skin.
- ◆ Decrease consumption of foods high in fat and partial substitution of polyunsaturated oils for saturated animal fat products.
- ◆ Substitute low-fat milk for whole milk.
- ◆ Decrease consumption of butter fat, eggs and other high dietary cholesterol.
- ◆ Decrease consumption of sugar and hidden sugar rich foods.

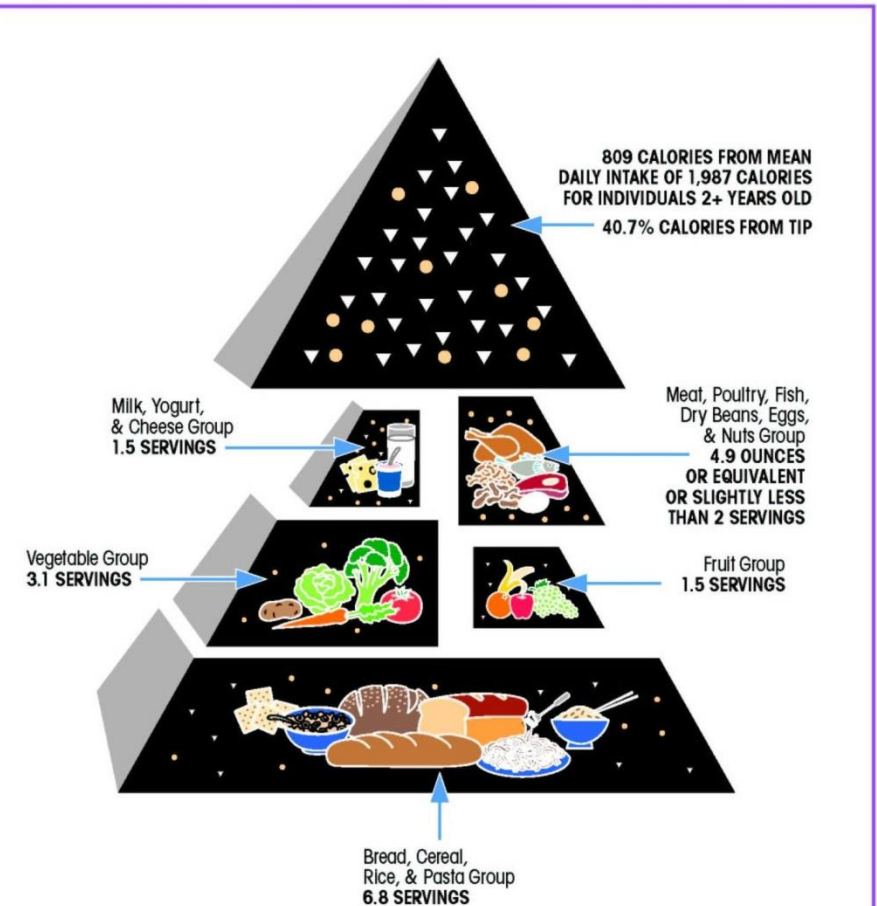
Food Guide Pyramid vs. Food Consumption Pyramid



FOOD GUIDE PYRAMID

Government's Guide to a Healthful Diet

Source: U.S. Department of Agriculture and the U.S. Department of Health and Human Services.

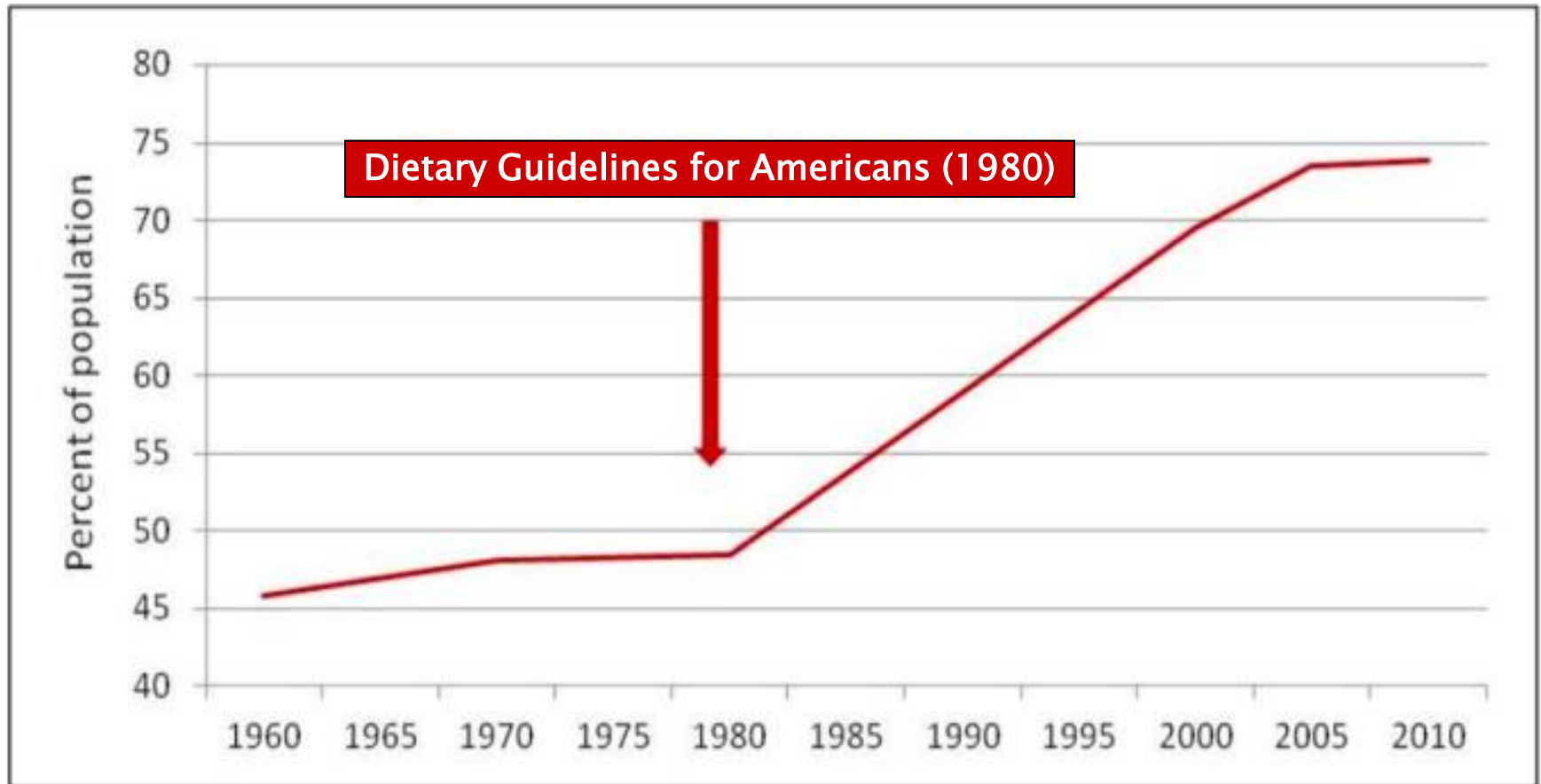


FOOD CONSUMPTION PYRAMID

The Average American Diet

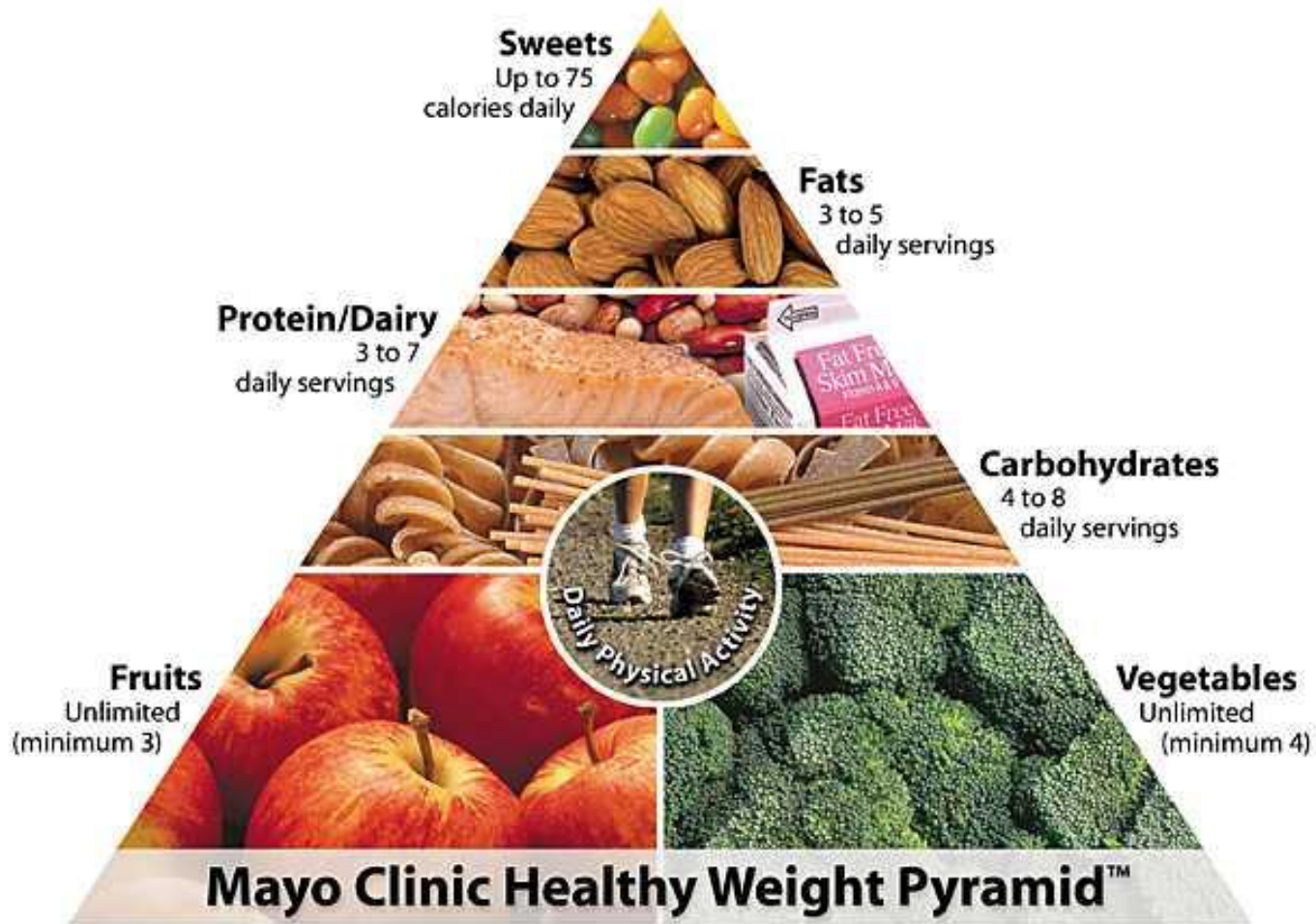
Source: Pyramid Servings Intakes by U.S. Children and Adults 1994-1996, 1998, Community Nutrition Research Group, Beltsville Human Nutrition Research Center, Agricultural Research Service, U.S. Department of Agriculture, October 2000.

Ooops, We Made People Fat



Rate of Overweight/Obesity in US (CDC data)

Mayo Clinic Healthy Weight Pyramid



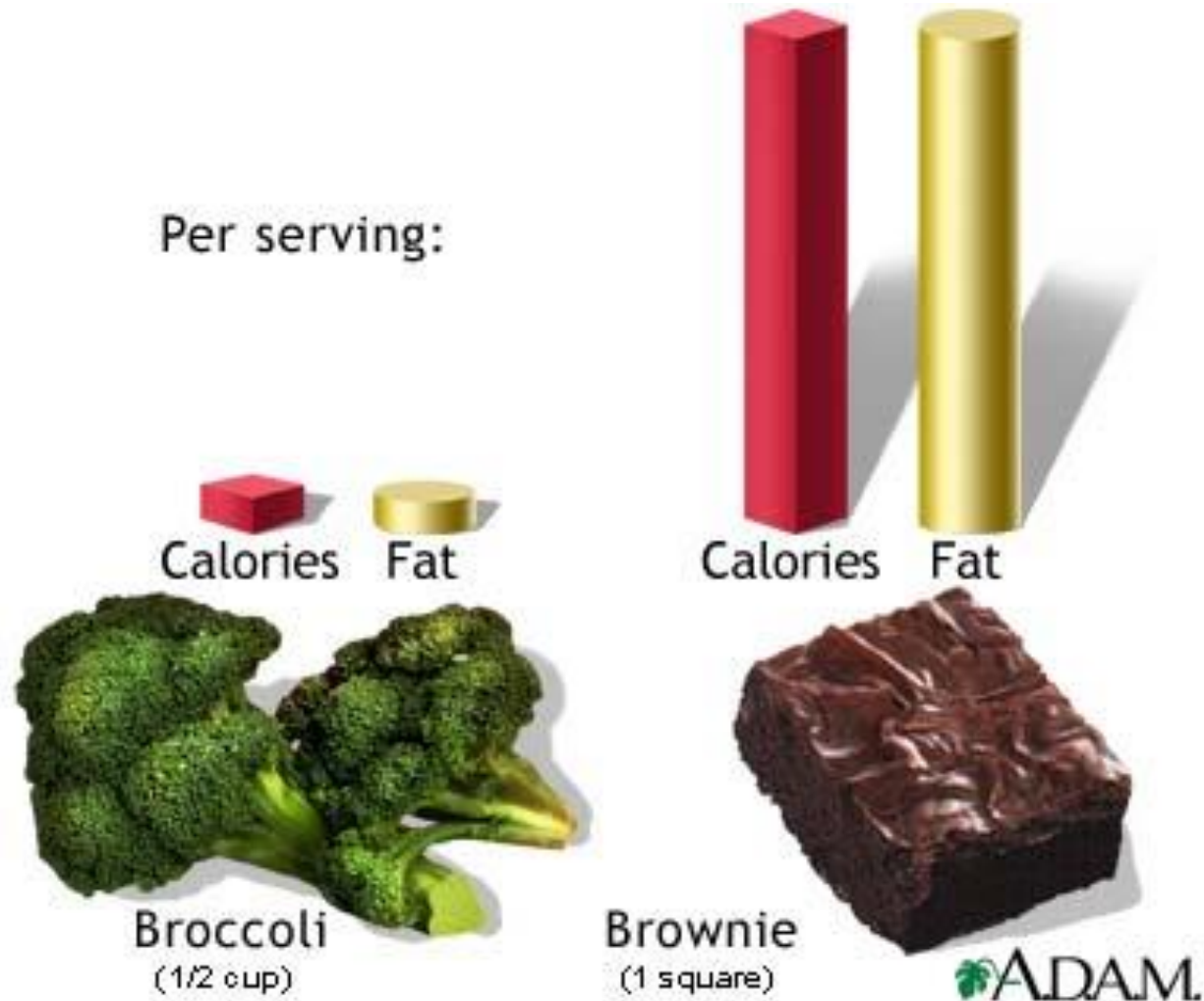
What is a normal serving size?



VS.



Consequences of our Food Choices



Eat a Variety of Fruits & Vegetables Every Day

CDC

Home
Fruit & Vegetable Benefits
Fruit & Vegetable of the Month
What Counts as a Cup?
Tips
Recipes
Q&A
Publications
For Health Professionals
Partner Web Sites

fruits & veggies more matters™

How Many Fruits & Vegetables Do You Need?

Every body is different. Enter your age, sex and level of physical activity to find the amount that's right for you.

Age:
Sex: [Select]
Physical Activity: Choose the level that you do above and beyond the light activity of everyday life:
[Select]
Show Me

Fruit and Vegetable of the Month

Mix up your daily choices with this month's featured fruit or vegetable. [View Calendar.](#)

Recipes

Find great meals and create your own cookbook in [our Recipes.](#)

Explore the World with Fruits and Vegetables

September is Fruits & Veggies - More Matters™ month. [Learn more.](#)

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CDC Centers for Disease Control and Prevention
 Department of Health and Human Services
 National Cancer Institute
USA.gov www.usa.gov

- ◆ The 5 a day program has been renamed to www.fruitsandveggiesmatter.gov
- ◆ This program encourages at least 5 servings of fruits and vegetables per day

10 Super Foods for Better Health!

1. Sweet Potatoes

A nutritional All-Star — one of the best vegetables you can eat. They're loaded with carotenoids, vitamin C, potassium, and fiber. Bake and then mix in some unsweetened applesauce or crushed pineapple for extra moisture and sweetness.



10 Super Foods for Better Health!

2. Grape Tomatoes

They're sweeter and firmer than other tomatoes, and their bite-size shape makes them perfect for snacking, dipping, or salads. They're packed with vitamin C and vitamin A, and you also get some fiber, some phytochemicals, and (finally) some flavor.



10 Super Foods for Better Health!

3. **Fat-Free** (skim) **or 1 % Milk** (but not 2%)

Excellent source of calcium, vitamins, and protein with little or no artery-clogging fat and cholesterol. Ditto for low-fat yogurt. Soy milk can have just as many nutrients — if the company adds them.



10 Super Foods for Better Health!

4. Broccoli

Lots of vitamin C, carotenoids, and folic acid. Steam it briefly and add a sprinkle of red pepper flakes and a dash of soy sauce.



10 Super Foods for Better Health!

5. Wild Salmon

The omega-3 fats in fatty fish like wild salmon can help reduce the risk of sudden-death heart attacks. And salmon that is caught wild has fewer PCB contaminants than farmed salmon.



10 Super Foods for Better Health!

6. Crispbreads

Whole-grain rye crackers, like Wasa, Ry Krisp, and Ryvita — usually called crispbreads — are loaded with fiber and often fat-free.



10 Super Foods for Better Health!

7. Microwaveable (or "10-minute") Brown Rice

Enriched white rice is nutritionally weak. You lose the fiber, magnesium, vitamins E and B-6, copper, zinc, and phytochemicals that are in the whole grain. Try quick-cooking or regular brown rice instead.



10 Super Foods for Better Health!

8. Citrus Fruit

Great-tasting and rich in vitamin C, folic acid, and fiber. Perfect for a snack or dessert. Try different varieties: juicy Minneola oranges, snack-size Clementines, or tart grapefruit.



10 Super Foods for Better Health!

9. Diced Butternut Squash

A growing number of food stores sell peeled, seeded, cut, and ready to go — into the oven, into a stir-fry, or into a soup or risotto, that is — bags of diced butternut squash. Every half cup has 5 grams of fiber and payloads of vitamins A and C.



10 Super Foods for Better Health!

10. Spinach or Kale

Loaded with vitamin C,
carotenoids, calcium and fiber.

